

### REMARKS

The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Claims 1-2, 4-6, 11-17, 21, 24-49, 53-60, 63-64 are pending in this case. Claims 53-60 have been allowed. Claims 1-2, 4-6, 11-14, 17, 21, 36, 53, 63 have been rejected under 35 U.S.C. § 112, second paragraph. Claims 1-2, 4-6, 11-17, 21, 24-49, 63-64 have been rejected under 35 U.S.C. § 103(a). Independent claims 1, 21, 36, 46, 53, 63 and dependent claims 2, 5-6, 13, 30, 32-33 have been amended. Claims 3, 7-10, 15-20, 22-24, 43, 45, 50-52, 61-62, 65 have been canceled without prejudice.

With respect to the Examiner's 35 U.S.C. § 103(a) rejections, Applicant has reviewed the cited art and respectfully submits that the art fails to disclose or suggest the Applicant's claimed invention. Therefore, Applicant respectfully traverses and requests favorable reconsideration.

#### Response to Drawing Objections

The Examiner objected to the drawings under 37 CFR 1.83(a). In particular, drawings must show every feature of the invention specified in the claims. The elements of claims 30, 32, 45 must be shown of the features canceled from the claims.

In response, Applicant submits herewith an amended Figure 8 as a Replacement Sheet adding the elements of claims 30 and 32. Claim 45 has been canceled. The elements in claims 30 and 32 are disclosed in the specification and therefore do not constitute new matter. The Examiner is respectfully requested to remove the objections to the drawings under 37 CFR 1.83(a).

#### Response to 35 U.S.C. § 112, Second Paragraph Rejections

The Examiner rejected claims 1-2, 4-6, 11-14, 17, 21, 36, 53, 63 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention.

Amended claims 1, 5, 21, 36, 53, 63 now feature language which make it clear what the subject matter is that the Applicant regards as the invention. Applicant believes that amended claims 1, 5, 21, 36, 53, 63 overcome the Examiner's rejection based on § 112, second paragraph grounds. The Examiner is respectfully requested to withdraw the § 112, second paragraph rejection.

### Response to 35 U.S.C. § 103(a) Rejections

Claims 1-2, 4-6, 11-17, 21, 24-42, 44, 46-49, 63-64:

The Examiner rejected claims 1-2, 4-6, 11-17, 21, 24-42, 44, 46-49, 63-64 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,515,777 ("Arnold et al.").

To reject the claims as obvious under 35 U.S.C. §103(a) there must be some suggestion or motivation, either in the references themselves or in the prior art, to modify or combine teachings. Furthermore, the prior art references must teach all the claimed limitations. Applicant has reviewed the cited art and, based on the arguments presented above, respectfully submits that the art fails to teach or suggest the Applicant's claimed invention, and fails to teach each and every element and limitation of the claims rejected herein. Therefore Applicant respectfully traverses the rejections and requests favorable reconsideration.

While continuing to traverse the Examiner's rejections, Applicant, in order to expedite the prosecution, has chosen to clarify and emphasize the crucial distinctions between the present invention and the devices of the patents cited by the Examiner. Specifically, claim 1 has been amended to include a method of optical network termination for removing noise accumulation in an optical ring network, said method comprising the steps of demultiplexing an input optical signal into a plurality of channels potentially corrupted with noise accumulation, determining which of said channels are in-use channels and which are unused channels, effectively removing said unused channels from said optical ring network by attenuating said unused channels sufficiently so as to prevent noise on said unused channels from circulating infinitely around said optical ring network, and multiplexing said plurality of in-use channels onto said optical network.

Arnold et al. teaches a signal transmission system having a number of wave division multiplex optical carriers linking a number of switching units arranged in a closed ring network. The carriers are amplified to compensate for loss and attenuation, but the ring gain of each carrier must be less than unity to prevent unwanted signal oscillation. An automatic gain control arrangement is operative for each optical carrier which is detected as being present at a switching unit, and the gain control is disabled for each carrier which is detected as being absent.

It is submitted that the purpose of the system of Arnold et al. is to control the gain of each carrier on the ring in order to prevent unwanted signal oscillation. In contrast, the purpose of the present invention is to prevent the effects of noise creep associated with noise being amplified repeatedly in a ring based optical network. In addition, a feature of the present invention is to disconnect unused channels from the optical ring thereby reducing noise and crosstalk between the channels. First, it is determined which channels are in use and which are unused. The unused

channels are then attenuated a sufficiently such that the channel is effectively (not necessarily physically) removed from the optical ring. These features, as claimed, are neither taught nor suggested by the Arnold et al. reference.

To reject the claims as obvious under 35 U.S.C. §103(a) there must be some suggestion or motivation, either in the references themselves or in the prior art, to modify or combine teachings. Furthermore, the prior art references must teach all the claimed limitations. Applicant has reviewed the cited art and, based on the arguments presented above, respectfully submits that the art fails to teach or suggest the Applicant's claimed invention, and fails to teach each and every element and limitation of the claims rejected herein. Therefore Applicant respectfully traverses the rejections and requests favorable reconsideration.

It is believed that claims 1-2, 4-6, 11-17, 21, 24-42, 44, 46-49, 63-64 overcome the Examiner's rejection based on § 103(a) grounds. The Examiner is respectfully requested to withdraw the rejection based on § 103(a).

Claims 43, 45:

The Examiner rejected claims 43 and 45 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,515,777 ("Arnold et al.") in view of U.S. Patent No. 5,612,805 ("Fevrier et al."). Claims 43 and 45 have been canceled without prejudice, making the rejection moot.

**Correction of Typographical Errors**

Amendments haven been made to correct grammatical and usage errors in the specification. No new matter has been added to the application by these amendments.

**Conclusion**

In view of the above amendments and remarks, it is respectfully submitted that independent claims 1, 21, 36, 53, 63 and dependent claims 2, 4-6, 11-14, 25-35, 37-42, 44, 47-49, 53-60, 64 are now in condition for allowance. Prompt notice of allowance is respectfully solicited.

In light of the Amendments and the arguments set forth above, Applicant earnestly believes that they are entitled to a letters patent, and respectfully solicit the Examiner to expedite prosecution of this patent applications to issuance. Should the Examiner have any questions, the Examiner is

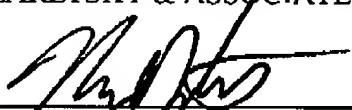
encouraged to telephone the undersigned.

Customer Number: 25937

Respectfully submitted,

ZARETSKY & ASSOCIATES PC

By:



Howard Zaretsky

Reg. No. 38,669

Attorney for Applicants

Zaretsky & Associates PC  
8753 West Runion Dr  
Peoria AZ 85382-6412  
Tel.: 623-362-2585